

IN THE CLAIMS

1. (Currently Amended) A block based video coding method comprising the steps

of:

① a) selecting ~~one of a~~ DC value of one of a left block (B3) and a upper block (B2) ~~of a target block (B)~~ based on a comparison of ~~result of~~ a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

b) predicting the selected DC value as a DC value of ~~the a~~ target block (B), thereby generating a predictive DC value of the target ~~value block~~.

2-29 (Canceled)

30. (Currently Amended) The method as recited in claim 1, wherein said step a) includes the steps of:

a1) obtaining a first differential value which is a difference between DC values of the upper left block (DC_B1) and the upper block (DC_B2);

a2) obtaining a second differential value which is a difference between DC values of the upper left block (DC_B1) and the left block (DC_B3);

a3) comparing the first differential value with the second differential value;

a4) selecting the DC value (DC_B2) of the upper block if the first differential value is larger than the second differential value; and

a5) selecting the DC value (DC_B3) of the left block if the first differential value is

smaller than the second differential value.

31. (Currently Amended) The method as recited in claim [1] 30, wherein the first differential value and the second differential value are absolute values.

32. (Canceled)

33. (Currently Amended) A block based video coding method, comprising the steps of:

a) selecting ~~one of a~~ DC value of one of a left block (B3) and a upper block (B2) ~~of a target block (B)~~ based on a comparison of ~~result of~~ a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

b) assigning the selected DC value as a DC value of ~~the a~~ target block (B), thereby generating a predictive DC value of the target ~~value~~ block.

34. (Currently Amended) The method as recited in claim 33, wherein said step a) includes the steps of:

a1) obtaining a first differential value which is a difference between DC values of the upper left block (DC_B1) and the upper block (DC_B2);

a2) obtaining a second differential value which is a difference between DC values of the upper left block (DC_B1) and the left block (DC_B3);

- a3) comparing the first differential value with the second differential value;
- a4) selecting the DC value (DC_B2) of the upper block if the first differential value is larger than the second differential value; and
- a5) selecting the DC value (DC_B3) of the left block if the first differential value is smaller than the second differential value.

35. (Currently Amended) The method as recited in claim 33, wherein the first differential value and the second differential value are absolute values.

36. (Canceled)

37. (Currently Amended) A block based video coding apparatus, comprising:
selection means for selecting ~~one of a~~ DC value of one of a left block (B3) and a upper block (B2) ~~of a target block (B)~~ based on a comparison of ~~result of~~ a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

prediction means for predicting the selected DC value as a DC value of ~~the a~~ target block (B), thereby generating a predictive DC value of the target ~~value~~ block.

38. (Currently Amended) The apparatus as recited in claim 37, wherein said selection means includes:

- a1) means for obtaining a first differential value which is a difference between DC

values of the upper left block (DC_B1) and the upper block (DC_B2);

a2) means for obtaining a second differential value which is a difference between DC values of the upper left block (DC_B1) and the left block (DC_B3);

a3) means for comparing the first differential value with the second differential value;

a4) means for selecting the DC value (DC_B2) of the upper block if the first differential value is larger than the second differential value; and

a5) means for selecting the DC value (DC_B3) of the left block if the first differential value is smaller than the second differential value.

39. (Currently Amended) The apparatus as recited in claim 37, wherein the first differential value and the second differential value are absolute values.

40. (Canceled)

41. (Currently Amended) **Data Bit** stream for use in block based video coding, the **data bit** stream transmitted to a decoder, comprising:

video information generated by performing DPCM coding on a predictive DC value and a DC value of the target block, wherein the predictive DC value is generating by the steps of:

a) selecting ~~one of a~~ DC value of one of a left block (B3) and a upper block (B2) ~~of a target block (B)~~ based on a comparison of ~~result of~~ a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

b) predicting the selected DC value as a DC value of the target block (B).

42. (Currently Amended) The data stream as recited in claim 41, wherein said step a) includes the steps of:

a1) obtaining a first differential value which is a difference between DC values of the upper left block (DC_B1) and the upper block (DC_B2);

a2) obtaining a second differential value which is a difference between DC values of the upper left block (DC_B1) and the left block (DC_B3);

a3) comparing the first differential value with the second differential value;

a4) selecting the DC value (DC_B2) of the upper block if the first differential value is larger than the second differential value; and

a5) selecting the DC value (DC_B3) of the left block if the first differential value is smaller than the second differential value.

43. (Currently Amended) The data stream as recited in claim 41, wherein the first differential value and the second differential value are absolute values.

44. (New) A block based video coding method for coding a target block based on a plurality of neighboring blocks wherein the neighboring blocks include a first block with a predetermined DC value, a second block with a predetermined DC value, and a third block with a predetermined DC value, the method comprising the steps of:

a) determining a first DC differential value based on the difference between the predetermined DC values of the first block and the third block;

b) determining a second DC differential value based on the difference between the predetermined DC values of the first block and the second block;

c) comparing the first DC differential value with the second DC differential value to obtain a predictive DC value;

d) transmitting the predictive DC value to a differential pulse code modulated coder;

and

e) performing differential pulse code modulation coding on the predictive DC value.

45. (New) The method as recited in claim 44, wherein the predictive DC value is:

a) the predetermined DC value of the second block if the first DC differential value is larger than the second DC differential value; and

b) the predetermined DC value of the third block if the first DC differential value is smaller than the second DC differential value.

46. (New) The method as recited in claim 44, wherein the first DC differential value and the second DC differential value are absolute values.

47. (New) The method as recited in claim 44, the method further comprising the steps of:

a) performing differential pulse code modulation coding on a predetermined DC value of the target block

b) generating video information based on the coded predictive DC value and the predetermined DC value of the target block; and

d) transmitting the video information to a decoder.

48. (New) A block based video coding apparatus for coding a target block based on a plurality of neighboring blocks, the neighboring blocks including a first block with a predetermined DC value, a second block with a predetermined DC value, and a third block with a predetermined DC value, the method comprising:

selector circuitry for selecting the predetermined DC value of one of the second block and the third block to obtain a predictive DC value for the target block; and

Ⓛ a differential pulse code modulation coder for receiving and coding the predictive DC value from the selector circuitry.

49. (New) the apparatus of claim 48, wherein the selector circuitry determines the predictive DC value based on the magnitude of one of a difference between the first block predetermined DC value and the third block predetermined DC value and a difference between the first block predetermined DC value and the second block predetermined DC value.

50. (New) The apparatus as recited in claim 49, wherein said selector circuitry comprises:

memory circuitry for receiving and storing the predetermined DC values of the first block, the second block, and the third block;

a first subtractor in communication with the memory for determining a first value based on the difference between the first block predetermined DC value and the third block predetermined DC value;

a second subtractor in communication with the memory for determining a second

value the difference between the first block predetermined DC value and the second block predetermined DC value;

a comparator in communication with the memory and the first and second subtractors for comparing the first value with the second value;

51. (New) The apparatus as recited in claim 50, further comprising an absolute value calculator in communication with the comparator and at least one of the first and second subtractors.

52. (New) The apparatus as recited in claim 48, wherein the differential pulse code modulation coder receives a predetermined DC value for the target block and outputs video information based on coding of the predictive DC value and the predetermined DC value for the target block.

53. (New) A bit stream representing video information coding a target block based on a plurality of neighboring blocks wherein the neighboring blocks include a first block with a predetermined DC value, a second block with a predetermined DC value, and a third block with a predetermined DC value, the bit stream generated according to a method comprising the following steps:

a) selecting as a predictive DC value of the target block one of the predetermined DC values of the second block and the third block, the selection based on the magnitude of one of a difference between the predetermined DC values of the first block and the second block, and a difference between the predetermined DC values of the first block and the third block;

c) performing differential pulse code modulation coding on the predictive DC value and a DC value of the target block; and

d) performing differential pulse code modulation coding on a predetermined DC value for the target block.
